

## Results of the stakeholder consultation on market design

Stakeholder event

Ove Wolfgang  
*SINTEF Energy Research*

2016-06-17 Brussels



Co-funded by the Intelligent Energy Europe  
Programme of the European Union



## (4) This is not the time to stop supporting RES

---

- ❑ A more ambitious implementation of environmental policy is needed to limit global warming and future mitigation costs.
- ❑ E.g. fewer emission permits
  - higher permit prices, higher costs for fossil-fuel generation, higher electricity prices, **profitable RES generation without support**
- ❑ However, this is not the situation today.
- ❑ Financial support for RES is still needed to continue the decarbonization of the European energy system



## Comments provided to (4)

---

- ❑ Intermittent resources are subject to the so called "cannibalization effect"
  
- ❑ Therefore,
  - Even if environmental externalities are internalized, and RES technologies reach "grid parity" ,
  - it is difficult to obtain sufficient investments through short-term price signal.
  - A long-term price-signal is needed for RES



## (6) RES support scheme: Characteristics of a good system

---

- Depends on i.a.
  - market penetration/maturity
  - whether markets are set up to fit for RES or not
  
- Takes into account risks for investors, because of cost of capital
  
- Designed to not interfere with short-term price signals, e.g. not incentivize production during negative prices

## (6) RES support scheme: Proposal

---

### Supported volume

- Wind & Solar: Based on actual production (MWh), but not reduced if production is cut (because of negative prices, balancing energy)
- Bio-based: Support based on a defined number of operating hours

### Floating price premium

- Price premium on top of average electricity prices
- Adjusted every 1-3 year to reach **target level** for total price

### Tenders

- Result of tender: **target level** for total price (electricity+ premium)
- Technology specific tenders should be allowed
- Small players (exempted / not excluded)

# Comments provided to (6)

---

## □ About proposed system

- Interesting, but complexity of implementation probably outweigh the benefits through reduced market distortions.
- Better to build upon already implemented schemes

## □ Recommended alternative

- For  $mc \approx 0$  techn.: CFDs (2-way) + 6 hour negative price rule (UK)
- For  $mc > 0$  techn.: Investment aid (per MW) + availability requirement

## Comments provided to (6)

---

- Unclear about participation of small players in tenders (exempted vs. pre-qualification)
  
- Have the project addressed the following?
  - The need for harmonization of RES support schemes in the EU
  - The need to continue policy of giving priority dispatch for renewables
  - If maybe some RES technologies do not need support in the future



## (7) Markets for electric energy: Implementation for the **intra-day** market

---

- Now, focus should be put on implementing integrated and well-functioning **intra-day** markets
- Gate closure should be close to real time operation
- Continuous trading
- However, to increase liquidity:
  - Some organized auctions is recommended
  - Consider reservation of cross-border transm. capacity for intra-day





## Comments provided to (7)

---

- Continuous trading close to real time is the most efficient solution
- Intraday auctions could be difficult to implement because it would require to assign a value to cross border capacity
- Reserve capacity for intraday with use-it-or-sell-it would be difficult to implement near real time (and reduce utilization)

## (9) A careful approach regarding capacity markets

---

- Over-investment through separate national markets should be avoided.
- It should be mandatory to allow the use of cross-border interconnection capacity to contract firm capacity in other countries.
- Product: financial option with a high strike price
- Firmness requirement & penalty for non-delivery
- Contracted amount should be affected by price (to reduce strategic bidding)

# Comments provided to (9)

---

- ❑ We are suggesting a system with cost recovery through
  - Short term price signal / wholesale market prices
  - Capacity payment (only for) firm capacity to solve security of supply
  - Support scheme for RES
  
- ❑ This gives an unfair perception of higher prices for renewables compared to fossil fuel generation
  
- ❑ RES
  - Is not firm
  - But with high shares, it contributes to security of supply and firmness

# Comments provided to (9), *continued*

---

## Proposal: add the following to recommendations

### Renewable energy

- Will be allowed to participate in capacity mechanism
- As a recognition of its contribution to SoS and reducing risk of foreign supply

### In case of firmness requirement

- RES participate with a % of capacity
- As a recognition of its contribution to generation mix

# Other comments

---

- Document is lacking a discussion
  - On grid tariffs
  - How to avoid inefficient indirect incentives
  
- We should be clear about which topics are addressed / not addressed in the project (gaps)
  
- Conclusions should be limited to addressed topics
  
- It would be helpful if we could relate conclusions to corresponding deliverables that provide the basis for them



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

Thank you very much  
for your attention

# Main findings in Market4RES project

---

## □ Main findings document

- <http://market4res.eu/>
- 5 pages
- Result of joint efforts of all the partners in Market4RES

## □ Basis

- Deliverables
- Feedbacks at events and advisory board meetings
- Iterations among partners

# Written consultation process of main findings

---

- ❑ Carried out 1. June – 17 June
- ❑ Advertised through
  - Project's mailing list, plus targeted organizations
  - Newsletter
  - Project homepage
- ❑ This is an integrated part of project
  - Impact on final recommendations



# Presenting feed-backs

---

- ❑ General comments are presented first
- ❑ Then for each specific part of document
  - Describe our view/recommendation
  - Comments provided

# Part I & II: Background and introduction

---

*Headlines only: no comments have been provided*

- (1)** The purpose of this document
- (2)** Initially, markets were not fit for RES
- (3)** Europe's policy for promoting integration of RES-E technologies has been a success story

# Structure of document

---

- Part I** Introduction
- Part II** Background
- Part III** Support mechanisms for RES
- Part IV** Making market fit for RES
- Part V** Other design elements
- Part VI** Process & deliverables




---

# Part III

## Support mechanisms for RES





**(5)** However, it is time to reconsider the design of support schemes

---

- Price volatility
- Firm capacity having problems to recover their investment costs
- Considerable financial support provided to RES generation

# Written consultation process of main findings

---

- ❑ Carried out 1. June – 17 June
- ❑ Advertised through
  - Project's mailing list, plus targeted organizations
  - Newsletter
  - Project homepage
- ❑ This is an integrated part of project
  - Impact on final recommendations